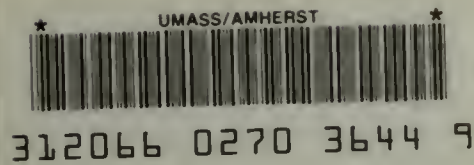


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DEVELOPING ENERGY RESOURCES:  
A FIVE POINT PLAN

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DECEMBER 1988

THE EXECUTIVE OFFICE OF ENERGY RESOURCES  
COMMONWEALTH OF MASSACHUSETTS

MICHAEL S. DUKAKIS  
Governor

SHARON M. POLLARD  
Secretary



## EXECUTIVE SUMMARY

### I. INTRODUCTION

#### Overall Objective

The Executive Office of Energy Resources (EOER) is the cabinet level agency of the Commonwealth responsible for developing, coordinating and promoting a comprehensive energy policy for Massachusetts. EOER's primary objective is to develop and implement energy policies and programs which encourage the energy industry to provide adequate and reliable energy supplies and services to meet the Commonwealth's needs and sustain economic growth. Energy supplies must be adequate not only to meet expected needs but also to cover unexpected contingencies, such as higher than expected energy demand growth or the loss of an energy supply source. Cost must also be considered. The energy needs of Massachusetts' citizens, businesses and industries must be met at a reasonable cost. At the same time, environmental impacts must be taken into account. Energy supplies must be developed or acquired in a manner that is consistent with environmental policies and goals.

#### The Current Situation

The adequacy, reliability, safety, cost and environmental consequences of Massachusetts' and New England's energy supplies have received a great deal of attention in the last few years. Much of this attention has been focused on the region's electricity situation. Analyses conducted for a variety of organizations in Massachusetts and New England have

found that, while there exist a number of resource options capable of meeting the region's electricity and energy needs, it has not been clear how these resources can be effectively and efficiently developed.

### Goal of This Report

The goal of this report, *Developing Energy Resources*, is to provide a clear statement of how EOER believes energy suppliers should select and efficiently develop new energy supplies. In it, EOER presents a course of action to be followed by Massachusetts in five key energy policy areas:

- 1) least-cost integrated planning;
- 2) energy efficiency;
- 3) natural gas;
- 4) cogeneration, small and independent power; and
- 5) new electric utility generation.

EOER believes that these five policy areas are on the "critical path" for achieving the overall objective of adequate energy supplies for Massachusetts.

## II. RECOMMENDATIONS FOR ACTION FOR ADEQUATE ENERGY SUPPLIES

### A. LEAST-COST INTEGRATED PLANNING

#### 1. Recommendation for Action

A formal least-cost integrated planning process should be adopted by policymakers and regulators, and implemented by the electric utility industry. This is necessary to identify and develop new power supply resources and new opportunities for using electricity more efficiently and economically. Adoption and implementation of a least-cost integrated planning process -- through selection, approval and development of the energy resource



options identified -- would ensure that Massachusetts' electricity supplies would be adequate to meet current and future needs, given a range of contingencies, at a reasonable cost and with minimal environmental impact.

"Least-cost integrated planning" is a comprehensive planning process which allows electric utilities to identify which new electricity resources to develop and to determine the order in which they should be developed. Least-cost integrated planning offers utilities, energy planners, policymakers, regulators, the business community and other energy consumers the means to sort through the variety of available electricity resource options: "demand-side" options such as conservation, load management and energy efficiency; "non-utility" options such as cogeneration, small and independent power; and new utility options such as new power plants, "repowering" and life extension of old plants, major transmission facilities, and power purchased from other utilities.

Under a least-cost integrated planning framework all resource options can be systematically evaluated against criteria which have been recognized generally as important and relevant: feasibility and adequacy; reliability; diversity and flexibility; cost; and environmental, economic and social impacts. Such a systematic assessment is necessary to identify and develop the mix of options which will best meet Massachusetts' electricity needs.

## 2. The Issues

While a broad consensus exists on the various electricity resource options available to meet the Commonwealth's future needs, questions remain about their

feasibility and how to select among them. The challenge is to select those electricity resource options which fare better (or best) on the criteria of adequacy, feasibility, reliability, diversity, flexibility, cost, and environmental, economic and social impacts. The difficulty lies in comparing different options across criteria, e.g., the cost of one versus the environmental impact of another. Moreover, if such a comparison is made and an agreement on a mix of options can be reached at one point in time, how can those most affected -- energy suppliers and consumers -- be assured that this mix will continue to be regarded as desirable over time? It is these dilemmas which adoption of a formal least-cost integrated planning process can resolve.

### 3. EOER's Proposal

The least-cost integrated planning regulations proposed to the Department of Public Utilities by EOER in June 1988 would require utilities to identify which resource options are feasible; establish the criteria for evaluating them; provide a means for determining what mix of options will best meet these criteria and hence Massachusetts' electricity needs; and address the issue of regulatory uncertainty. EOER's least-cost integrated planning proposal calls for a coordinated review every two years of utilities' electricity plans by the Energy Facilities Siting Council and the Department of Public Utilities. Participation by state energy policymakers and representatives of all those who would be affected by the utilities' plans -- businesses, industries, consumer and environmental groups -- would be encouraged. Such



participation would go far to create consensus on how Massachusetts' utilities, with guidance from policymakers and regulators, will meet the energy needs of the Commonwealth. Utilities would benefit from receiving regulatory approval of their supply plans on a regular basis, with assurances of cost recovery for approved expenditures.

#### 4. Summary

A formal least-cost integrated planning process can play an important role in answering the question of how to identify those energy supply options which should be developed first. The remaining four sections of this chapter discuss what actions should be taken to facilitate the development of specific options to ensure that Massachusetts' energy supplies will be adequate to meet current and future needs, given a range of contingencies, at a reasonable cost and in a manner consistent with environmental policies. EOER has identified ways in which each of these specific resources should be pursued as part of a least-cost energy mix for Massachusetts.

### B. ENERGY EFFICIENCY

#### 1. Recommendation for Action

Successfully developing all cost-effective energy efficiency will require aggressive action and comprehensive direct investment by Massachusetts' electric and gas utilities. The Commonwealth should promote a policy and regulatory framework which provides fair and adequate incentives to utilities for such action and investment. In addition, the Commonwealth should continue to adopt and promote all appropriate energy efficiency standards, codes and regulations. These efforts must be undertaken immediately to ensure that energy efficiency opportunities are not lost and that this important resource is developed to help meet both short- and

long-term energy needs.

Efficiency improvements are equivalent to providing energy from power plants -- each kilowatt or kilowatthour conserved means that one less needs to be generated. Energy efficiency, however, offers additional benefits over power plants: it is relatively inexpensive; environmentally clean; highly reliable; contributes to Massachusetts' economic competitiveness by reducing energy costs to business and industry; and creates local employment and investment opportunities. Among all energy resource options, efficiency offers utilities the greatest potential for satisfying future power supply requirements, at a reasonable cost and with minimal environmental and social impacts. Electric and gas utilities can tap this resource through programs which provide information, energy efficient equipment, financial incentives, and technical assistance to encourage customers to make efficiency improvements.

## 2. Advantages and Opportunities

The primary advantage of energy efficiency is its very low cost, relative to other power supply options, over their lifetimes. This cost advantage argues that efficiency improvements should be developed on their economic merits alone. However, energy efficiency also offers a host of other advantages to utilities, their customers and society generally. These include planning flexibility, minimal environmental impacts, economic benefits such as increased competitiveness, utilization of indigenous resources and local job creation.



Cost-effective energy efficiency opportunities are also widely available. . Retrofitting existing buildings and replacing existing appliances with more energy efficient devices offers substantial conservation potential immediately. For example, in 1986 the Commonwealth retained an energy service company to improve the efficiency of two of its large downtown Boston office buildings, the McCormack and Saltonstall, whose combined energy bill was three million dollars per year. As a result of installing equipment such as timers on lighting, and changing maintenance procedures, the energy bill for the two buildings has been reduced by over \$840,000 per year. Similar energy efficiency improvements in office buildings throughout Massachusetts could save substantial amounts of energy.

New buildings, industries and equipment offer some of the best opportunities for cost-effective energy efficiency investments. It is far less expensive to design an energy-efficient building than to retrofit an inefficient one. It is important that efficiency for new uses be promoted now because cost-effective opportunities may be lost forever if inefficient new uses are allowed to be installed. Opportunities for energy efficiency in new uses will always be available, and will be greatest at the time of greatest need -- when growth in new uses, and consequently customer demand, are high. In addition, new technologies for improving energy efficiency are constantly being developed, further ensuring that cost-effective conservation opportunities will exist well into the future for both retrofit and new energy uses.

### 3. The Utilities' Role

Utilities should fully consider energy efficiency options in their planning for new power supplies. Energy efficiency and conservation programs should be evaluated side-by-side with both utility and non-utility generating options. Utilities should pursue through direct investment those programs which rank highest in such an evaluation. Direct investment efforts for energy efficiency should be comparable to the commitment utilities have historically demonstrated to power plants.

The direct investment approach to utility energy efficiency programs is necessary because customers are unlikely to develop the full potential for cost-effective conservation on their own. Market imperfections result in investments by individual customers acting alone which, taken together, are less than optimal from the utilities' or society's point of view. Direct investment, packaged and marketed properly, provides a means for utilities to overcome these obstacles.

### 4. The Commonwealth's Role

The Commonwealth must act to provide utilities with the appropriate policy and regulatory incentives for cost-effective direct investment in energy efficiency. Adoption of a formal least-cost integrated planning process should provide the necessary framework. In addition, the Commonwealth should continue to adopt energy efficiency standards, codes and regulations, mechanisms that are not available to utilities. Massachusetts has already implemented appliance efficiency standards and upgraded the energy portions

of the residential and commercial building codes. In the coming years, EOER will pursue additional efforts along these lines.

## 5. Summary

The challenge facing Massachusetts today is to take full advantage of all available cost-effective energy efficiency opportunities. Utilities should adopt aggressive direct investment approaches to developing conservation opportunities, while the Commonwealth should continue to promote and enforce appropriate energy efficiency standards, codes and regulations, in addition to providing a supportive regulatory environment for utility direct investment efforts.

## C. NATURAL GAS

### 1. Recommendation for Action

Additional pipeline capacity to deliver at least 300 to 400 million cubic feet a day of incremental natural gas supplies to Massachusetts should be built by the early 1990s in order to meet the growing needs of traditional gas customers as well as new electric generation loads. The construction of such new capacity would enhance the Commonwealth's fuel diversity and reliability, provide substantial environmental benefits, enhance inter- and intra-fuel competition and provide an efficient and economic fuel supply source, particularly for power generation.

Massachusetts needs new gas pipeline capacity because existing capacity is fully utilized in the peak winter heating season and substantial new demand is expected over the next decade. In the absence of major additions to pipeline capacity, much of this potential demand may be served instead by other fuels, with the likely result being a less secure,



more expensive and less environmentally desirable fuel mix. Currently, a number of proposals to expand pipeline capacity to Massachusetts and elsewhere in the Northeast are being considered by the Federal Energy Regulatory Commission (FERC) in its "open season" proceeding.

## 2. Advantages of Increasing Natural Gas Use

Massachusetts would realize a number of benefits from the increased availability of new natural gas supplies, including:

- o **Fuel Diversity.** Additional gas supplies would increase the diversity of Massachusetts' fuel mix. With its natural gas market share continuing to lag behind the United States', Massachusetts remains overly dependent on imported oil to meet its energy supply needs.
- o **Reliability.** Natural gas is a highly reliable fuel supply. Existing supplies are abundant, substantial new supplies are readily available to meet long-term needs, and the delivery of these supplies is not subject to disruption by unreliable suppliers.
- o **Environmental Benefits.** Gas is the cleanest burning and most environmentally benign fossil fuel. With its increased availability, certain existing power plants can switch to gas, and new cogeneration, small and independent power facilities may use it, resulting in the emission of fewer harmful air pollutants than

if other fuels were used.

- o **Efficient and Economic Supply Source.** Gas would be an efficient and economic fuel supply source, particularly for power generation. Power plant technologies which use gas are relatively efficient and the cost of natural gas compares favorably with other fuels.
- o **Increased Competition.** The addition of a new gas pipeline would increase competition locally for the transportation and sale of gas and would place downward pressure on the cost of gas from existing suppliers, thereby benefiting consumers.

### 3. Prospects for Additional Gas Supplies

In response to a growing interest in the market potential for gas in the Northeast, FERC established an "open season" in July 1987 to invite new proposals to expand gas pipeline capacity into the region and eliminate obsolete proposals. FERC received approximately thirty-five applications by the filing deadline of January 15, 1988. A number of these applications proposed to expand pipeline capacity into Massachusetts.

To date, FERC has designated several projects proposing to serve Massachusetts as "discrete" and therefore able to receive expedited approval. Together they will provide incremental pipeline capacity of about 200 million cubic feet per day to the Commonwealth and are expected to be approved and operating by 1989 or 1990.

The remaining projects, which include the bulk of the new gas supplies proposed for Massachusetts, have been the focus of settlement discussions during the summer and fall of 1988. As of November 1988, no consensus had emerged in support of a single proposal. EOER, along with the Energy Facilities Siting Council and the Department of Public Utilities, has been playing an active role to encourage the settlement discussions. The Commonwealth favors a settlement approach as the best, and perhaps only, means of meeting the urgent needs of Northeast customers for additional pipeline supplies in a timely manner. If a broadly accepted settlement is not achieved, lengthy comparative hearings may be required to determine which projects go forward.

#### 4. Strategies for Meeting Expected Gas Demand

The bulk of the gas requested by Massachusetts firms in the open season is required to fuel new power plants in the early 1990s. If settlement negotiations fail, it is unlikely that Massachusetts will obtain its needed pipeline supplies until the mid-1990s. For many proposed cogeneration, small and independent power facilities, the inability to secure firm pipeline gas by a certain date may lead to project cancellation. Some facilities may be able to use interruptible gas supplies and burn oil when pipeline gas is unavailable. However, air quality and operational considerations may limit their ability to burn oil. Therefore, if substantial new pipeline capacity cannot be made available in a timely manner, it will be incumbent upon utilities to place a greater emphasis on conservation of both electricity and gas. Even with



aggressive conservation efforts, however, substantial additions to existing pipeline capacity will be needed to meet Massachusetts' future energy needs.

## 5. Summary

There is a large potential market for natural gas in Massachusetts that can be served only if additional pipeline capacity of about 300 to 400 million cubic feet per day is sited and built by the early 1990s. EOER believes that settlement in FERC's "open season" proceeding offers the best hope for the delivery of significant new volumes of pipeline gas to Massachusetts within this timeframe. Supplemental gas and expanded conservation efforts have important roles to play, but it is clear that substantial additions to pipeline capacity are desirable and would benefit Massachusetts' energy consumers.

## D. COGENERATION, SMALL AND INDEPENDENT POWER

### 1. Recommendation for Action

The Commonwealth should encourage the development of those cogeneration, small and independent power projects which have social and environmental benefits in addition to supplying economic electricity for utility ratepayers. Such projects would utilize existing commercial and industrial sites; improve the competitiveness of Massachusetts' business and industry; and minimize environmental impacts.

EOER recognizes that a wide range of facilities not owned by utilities will have an important role in contributing to Massachusetts' portfolio of electricity supply options. The benefits of the development of those cogeneration, small and independent power projects which directly improve the competitiveness of Massachusetts businesses and generate

electricity with minimal environmental impact should be recognized over those projects which do not.

## 2. The Current Situation

Under the Massachusetts regulations implementing the federal Public Utility Regulatory Policies Act of 1978, retail electric utilities are required to solicit bids for cogeneration and small power generating capacity (so-called "qualifying facilities"). At least once a year, in an innovative competitive bidding process, utilities select among competing projects desiring to sell their power. Utilities may consider price and other project characteristics, such as size, fuel type and site ownership, when evaluating bids to determine from which projects to buy electricity on a long-term basis. Utilities are not required by law or regulation to purchase power from independent power producers, e.g., natural gas-fired units not owned by a utility.

The number of projects offered in response to recent utility requests for proposals has been impressive. Boston Edison Company received bids for 1,848 megawatts when it sought 200 megawatts of capacity; Eastern Edison Company received bids for almost 180 megawatts when it sought 30 megawatts; and Commonwealth and Canal Electric Companies received proposals for 900 megawatts when they sought 109. In the largest response to date, New England Power Company received bids representing 4,780 megawatts to fill 200 megawatts of projected need. To adequately assess the relative benefits of, and to efficiently select among, a diverse and rapidly expanding group of cogeneration, small and



independent power projects, the Commonwealth needs to refine the implementation of its competitive bidding policy in a manner consistent with a least-cost integrated planning process.

### 3. EOER Initiatives

EOER has undertaken several initiatives, consistent with the implementation of a formal least-cost integrated planning process, which it believes will facilitate the identification, selection and development of those cogeneration, small and independent power projects which offer social and environmental benefits in addition to supplying economic electricity for utility ratepayers.

First, EOER is working to improve the consideration of these benefits in the existing cogeneration and small power project evaluation system to give credit to projects at existing commercial and industrial sites; to encourage fuel diversity; and to promote the use of renewable energy resources. Cogeneration projects at existing sites have several advantages which new, stand-alone projects do not. They can reduce the costs of doing business for the industries they serve, they have a greater likelihood of actually being completed, and they can provide environmental benefits to the extent that older, "dirtier" boilers are replaced by cleaner ones. Projects which use fuels such as natural gas and coal, which have been underutilized in Massachusetts, contribute to fuel diversity. Utilities should recognize these benefits in their evaluation of projects under the competitive bidding system. Lastly, projects which use renewable fuels should not



only be given credit for their negligible environmental impacts and use of indigenous resources, but should be given financial incentives to encourage their development and secure the social and environmental benefits they confer.

Second, EOER is working with the Department of Environmental Quality Engineering to improve the existing environmental permitting process not only for cogenerators, small and independent power producers, but also for utility-owned generation.

Third, EOER is working to minimize missed opportunities for cogeneration and small power development in Massachusetts. EOER is evaluating the desirability of increasing the size limit (which now stands at one megawatt) for projects which can sell their power to utilities without participating in the competitive bidding process. The costs of participation may be too high for some very small but beneficial projects.

EOER also believes that, in some circumstances, it would be beneficial for cogeneration, small and independent power facilities to make retail sales of their power either on-site or to a limited number of customers, in addition to local utilities. Under current law, sales of this type are effectively prohibited. EOER supports allowing limited retail sales as a way to realize fully the benefits offered by these projects. EOER recognizes concerns that have been raised by the utilities about limited retail sales. EOER agrees that such sales should be limited so that utilities would not lose significant numbers of customers, and that utilities should be

able to charge a fair price for reconnection or backup power that they may be obliged to provide.

#### 4. Summary

EOER is promoting several specific initiatives to achieve the goal of encouraging those cogeneration, small and independent power projects with social and environmental benefits in addition to supplying economic electricity for utility ratepayers. These initiatives will also ensure that the utilities' evaluation and selection of cogeneration, small and independent power projects as resource options will be consistent with least-cost integrated planning principles. In addition, they will help to remove unnecessary barriers to the development of these projects.

### E. NEW ELECTRIC UTILITY GENERATION

#### 1. Recommendations for Action

New utility generation projects, including power plant sites and technologies, should be identified and proposed now by the Massachusetts utilities where they will improve the reliability, diversity and flexibility of the utility system; minimize the environmental impacts of electricity generation; and provide insurance against uncertainties with respect to the adequacy of electricity supplies. The criteria used to select projects should be consistent with the principles of least-cost integrated planning. To facilitate the timely selection of projects, EOER supports the implementation of regulations which provide for a coordinated pre-siting and pre-approval process for new electric utility generation.

New electric utility generation -- including power plants, major transmission facilities, and life extension work or "repowering" at existing power plants -- is yet another option in the utilities' resource portfolio. While it has not



received as much attention in recent years as some other options (e.g., energy efficiency and non-utility generation), new utility generation has characteristics that may make it particularly appropriate for meeting utilities' electricity supply needs in some situations. These characteristics may not be unique to utility generation, but utilities may be uniquely positioned to pursue certain projects with them: power plants on utility-owned sites, regional transmission interconnections, or projects which are needed but which other entities are unlikely or unable to develop. The task for utilities, energy policymakers and regulators is to identify the right plant at the right time and place.

## 2. The Role of New Utility Generation

EOER recognizes that new utility generation has a place in utilities' supply plans. Massachusetts' utilities should pursue those projects which will offer reliability, diversity and flexibility benefits to the system; minimize the environmental impacts of electricity generation; and provide insurance against uncertainties with respect to the adequacy of electricity supplies.

- o **Reliability.** New utility power plants can enhance the reliability of the transmission grid serving Massachusetts. Electric generators provide not only "real power", or what is commonly referred to as electricity, to meet the demands of customers, but also what is called "reactive power" which is necessary to maintain the voltage levels and stability of



the transmission grid. In the right location, new power plants can enhance the stability of the grid. In areas like eastern Massachusetts, with growing demand and unreliable generation, properly sited new utility power plants may be part of the solution (along with better plant maintenance, new capacitors and new non-utility generation) to the occasional system reliability problems that have begun to occur.

- o **Diversity and Flexibility.** New utility generation can also add to the diversity and flexibility of Massachusetts' utility system. The increased use of natural gas, clean coal, and renewable technologies in both utility and non-utility generation will add to Massachusetts' fuel diversity. Utilities, however, may be in the best position to investigate the potential of some emerging technologies, such as advanced clean coal and photovoltaics, and to realize the diversity benefits they can offer. New, renewable or cleaner burning and more efficient dual fuel plants can also add to utilities' flexibility if the operation of older, "dirtier" plants is limited by new environmental requirements, such as measures to reduce acid emissions.

- o **Meeting Environmental Requirements.** New utility generation should also be considered to

meet new environmental requirements. These new requirements may potentially limit the operations of existing power plants. While energy efficiency and non-utility generation can make up for the loss of some existing utility generating capacity, utilities should be exploring new power plant technologies, including coal gasification and photovoltaics, and identifying potential sites now to replace existing "dirty", hazardous or inefficient power plants. New power plants, in conjunction with additional transmission projects, non-utility generation and aggressive energy efficiency programs, may prove to be the utilities' most effective and economic option for ensuring adequate future electricity supplies.

o **Forecasting and Supply Resource Risk.**

Utilities face many uncertainties with respect to demand forecasting and supply planning. Plans for new utility generation may be part of the utilities' "insurance" policy to guard against the possibility that electricity supplies will not be adequate to meet demand. Plans for new transmission facilities or the repowering or life extension of existing plants may be especially appropriate because of the flexibility they offer, and their generally

shorter lead-times and lower costs.

### 3. Pre-approval and Least-Cost Integrated Planning

A coherent least-cost integrated planning process, with pre-approval of utility resource plans, can help the utilities to realize the reliability, diversity, flexibility, environmental, and insurance benefits that new utility generation can offer. EOER supports the adoption of a pre-siting and pre-approval process for new utility generation within the context of a formal least-cost integrated planning framework. A pre-approval process would provide Massachusetts' utilities with the direction they are seeking from policymakers and regulators. Within a least-cost integrated planning framework, it would facilitate the utilities' selection of the appropriate next power plant.

### 4. Utility Plans for New Generation

Several utilities are currently including preliminary or firm proposals for new generation in their long-range supply plans. These include: a new power plant at Boston Edison's Edgar Station in Weymouth, Massachusetts; repowering of New England Power Company's Manchester Street station in Providence, Rhode Island; another power purchase from Hydro Quebec via Central Maine Power Company; a power purchase involving construction of transmission facilities from Nova Scotia to Plymouth, Massachusetts; and a possible power purchase over existing transmission lines from New Brunswick.

### 5. Summary

New utility generation has a role to play in



Massachusetts' future electricity supply mix. Electric utilities should be identifying and selecting power plant sites and technologies now to improve the reliability, diversity and flexibility of the utility system; to minimize the environmental impacts of electricity generation; and to provide insurance against uncertainties with respect to the adequacy of electricity supplies. The benefits that new utility generation can provide would be recognized with the implementation of a formal least-cost integrated planning process in Massachusetts. The utilities should then be able to identify, select, gain approval of and develop appropriate generation projects.

### III. CONCLUSION

The energy debate in Massachusetts has focused until recently on the questions of whether Massachusetts needs additional energy and electricity supplies and whether there are resource options which could meet this need. The growing consensus is that the answers to these two questions are yes. Now the imperative is to move on to the still unanswered questions: how can energy suppliers, policymakers and regulators identify those options which should be developed first, and what actions should be taken to facilitate their development? This report has addressed these latter two questions.

EOER has laid out a course of action for five "critical path" energy policy areas: least-cost integrated planning;

energy efficiency; natural gas; cogeneration, small and independent power; and new utility generation. Adoption of a formal least-cost integrated planning process by policymakers and regulators and its full implementation by the electric utility industry will answer the question of which energy supply resources to develop first. With a least-cost integrated planning framework in place, utilities, policymakers and regulators can then focus on the second remaining question: what are the actions necessary to make these resources a reality? This report, *Developing Energy Resources: A Five Point Plan*, has discussed the actions with which EOER would begin. It is EOER's initial response to the two still open questions. However, EOER believes that if its recommendations for action are followed, the Commonwealth's citizens will enjoy a safe, secure, and economical energy future.

